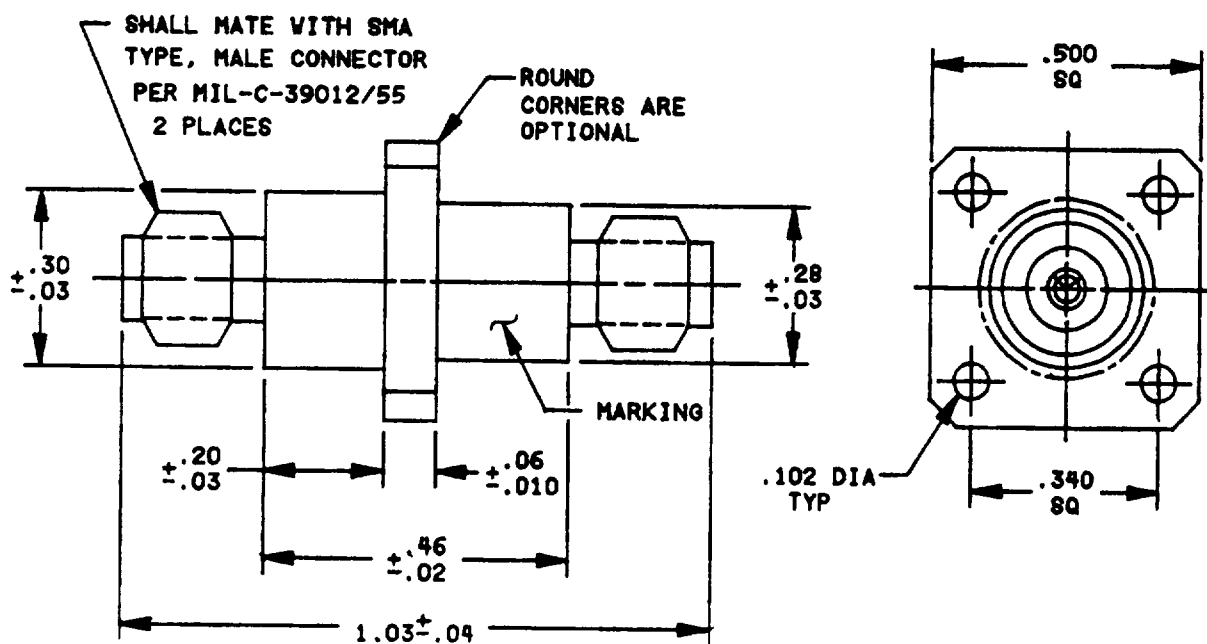


MILITARY SPECIFICATION SHEET

ATTENUATOR, FIXED, COAXIAL LINE, (SMA CONNECTORS),  
BULKHEAD, CLASS IV, LOW POWER

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for acquiring the attenuators described herein shall consist of this specification and the latest issue of MIL-A-3933.



| INCHES | MM   | INCHES | MM   | INCHES | MM    |
|--------|------|--------|------|--------|-------|
| .010   | .25  | .102   | 2.59 | .340   | 8.64  |
| .02    | .5   | .20    | 5.1  | .46    | 11.7  |
| .03    | .8   | .250   | 6.35 | .500   | 12.70 |
| .04    | 1.0  | .28    | 7.1  | 1.03   | 26.2  |
| .062   | 1.57 | .30    | 7.6  |        |       |

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is  $\pm .005$  (.13 mm).

FIGURE 1. Dimensions and configuration.

## ENGINEERING DATA:

Class: IV.

Operating frequency range: 2 to 12.4 GHz.

Test frequencies for VSWR and attenuation measurements: 2, 4, 8, and 12.4 GHz.

Basic test frequency: 8 GHz.

Operating temperature range:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ . Power input is derated linearly from  $+25^{\circ}\text{C}$  to 0.2 watt at  $+125^{\circ}\text{C}$ .

Maximum weight: 0.45 oz.

## REQUIREMENTS:

Dimensions and configuration: See figure 1.

Nominal impedance: 50 ohms.

Attenuation: See table I for attenuation values and tolerances.

VSWR:  $(1.07 + .015f):1$  (Where  $f$  is the frequency in GHz).

Power input:

Average: 2 watts at  $25^{\circ}\text{C}$ .

Peak: 100 watts (Duty cycle of 5 percent and a maximum pulse width of 10 microseconds).

Part number: M3933/24- (and dash number from table I).

TABLE I. Attenuation values.

| Dash number | Attenuation (dB) |
|-------------|------------------|
| 01 N<br>S   | 10 $\pm 0.3$     |
| 02 N<br>S   | 15 $\pm 0.5$     |
| 03 N<br>S   | 20 $\pm 0.5$     |

Note: Attenuators covered by this specification sheet are substitutable for the manufacturer's part numbers specified in table II. This information in no way implies that manufacturer's part number is suitable as a substitute for the military part number.

TABLE II. Substitution information.

| Military<br>part<br>number<br>M3933/24- | Manufacturer's<br>code | Manufacturer's<br>part number | NSN              |
|---|------------------------|-------------------------------|------------------|
| 01                                      | 97942                  | 583R575410                    | 1270-01-083-3368 |
| 02                                      | 97942                  | 583R575H15                    | ---              |
| 03                                      | 97942                  | 583R575420                    | ---              |

## Custodians.

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Navy - EC  
Air Force - 85

## Preparing activity:

Navy - EC

(Project 5985-0993-16)

## Review activities:

Army - MI  
Air Force - 11, 99  
DLA - ES

## User activities:

Navy - AS, MC, SH

## Agent:

DLA - ES

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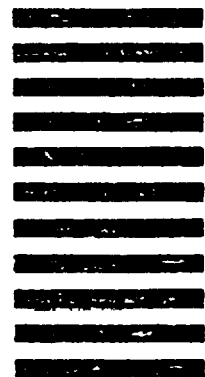
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2. DOCUMENT TITLE

3a. NAME OF SUBMITTING ORGANIZATION

4. TYPE OF ORGANIZATION (Mark one)

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5. PROBLEM AREAS

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